Patent Claims:

1. Assembly of an electrodynamic fractionating unit for the fragmenting, grinding, or suspending of a brittle material to be processed, said unit comprising:

a chargeable electrical energy store (1) with two electrodes connected to its output, wherein one of these electrodes is at reference potential while the other electrode can be admitted with a pulsed high voltage via an output switch (2) on the energy store;

a reaction vessel (3) filled with a process fluid in which the material to be processed is submerged and the two exposed electrode ends are arranged at an adjustable distance opposite each other, thereby forming the reaction zone, wherein the electrode (4) which can be admitted with high voltage is surrounded by an insulating casing (5) right up to the exposed end region and wherein this insulating casing in the end region is also submerged in the process fluid;

characterized in that,

the energy store together with its output switch, the electrodes with feed line, and the reaction vessel are positioned in a completely enclosed volume surrounded by an electrically conductive wall, meaning the encapsulation (6), and that this volume enclosed by the encapsulation is at a minimum,

the wall thickness of the encapsulation at least equals the penetration depth corresponding to the lowest component of the Fourier spectrum of the pulsed electromagnetic field and has at least the thickness required for the mechanical strength,

that the electrode at reference potential (4) is connected via the encapsulation wall to the ground potential side (8) of the energy store,

and that the electrode admitted with high voltage is connected via the shortest distance to the output switch on the energy store.

2. The assembly as defined in claim 1, characterized in that sections of the encapsulation wall can be removed or that the encapsulation wall is provided with at least one area of access for the batch-type processing of the fragmentation product.

3. The assembly as defined in claim 1, characterized in that for the continuous processing of the fragmentation product, the encapsulation wall is provided with at least one pipe section (9) of a conductive material, which is directed toward the outside and is used for the batch feeding, as well as at least one additional pipe section (10) for the material removal, wherein the length and clear width of these pipe sections are dimensioned such that at least the high-power, high-frequency share of the spectrum of the electromagnetic field, generated by the high voltage pulse, cannot escape through these pipe sections or is weakened to the legally prescribed level inside the pipe sections before reaching the opening to the environment.

4. The assembly as defined in claims 2 and 3, characterized in that the encapsulation wall is a hollow body with the energy store installed in one inside front wall region while the other front wall region forms the reaction vessel.

5. The assembly as defined in claim 4, characterized in that the encapsulation has a polygonal or round cross section and an elongated form or a form that is angled at least once.

6. The assembly as defined in claim 5, characterized in that the electrode at reference potential is installed in the center of the front wall of the reaction vessel, that the high-voltage electrode is positioned in the center of the opposite wall, and that the latter is connected to the output switch of the energy store via a path that is coaxial to the encapsulation.

7. The assembly as defined in claim 6, characterized in that the electrical energy store together with the output switch is positioned in the encapsulated area either above or on the same level or spatially below, relative to the reaction vessel.

8. The assembly as defined in claim 7, characterized in that the electrode at reference potential is embodied to form a central part of the front, or is embodied as perforated bottom, or as ring-shaped or rod-shaped electrode.

9. The assembly according to one of the claims 1 to 8, characterized in that the energy store is separated from the reaction vessel by a protective wall.